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ABSTRACT

This developmental course in career planning is conceived as a voluntary class open to secondary school students who feel that they are ready to benefit from it. Its function, rather than serving the manpower needs of business and industry, is to assist students to become more aware of themselves as contributing individuals and of the many ways in which they can use their talents productively. Decision-making skills form an integral part of the course so that individuals can utilize the skills beyond the immediate task of career decision-making. The complex issue of work itself is also discussed; the three-and four-day week, high unemployment, and the welfare question are woven into the relevant course content. Nine topics are suggested for inclusion in this course to be offered by the Guidance Department; outlines, resources, and activities are available for most of them. Books, films, games, and kits are also included for the entire course. (SES)

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CAREER DEVELOPMENT AND PLANNING

(A CREDIT COURSE)

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Career Development and Planning

Preamble

This developmental course could be offered for one credit*1 to year two, three and four students who are serious about taking an intensive course in career development and planning and who are ready. The voluntary nature of the course and the requisite readiness of the candidates cannot be over-emphasized. Obviously, all students would not take this course, nor would all profit from it.

Generally speaking this course would be offered in the Social Environmental Studies section of HS:1. Because of the special training of the guidance personnel in the school, it seems logical that this course should be a major responsibility of the Guidance Department.

Many of the topics contained in this course are found in the Curriculum Guideline I:3 and S:5. Because of this fact and as a result of a ruling from the Ontario Department of Education proposed credit courses in Career Development and Planning (or similar titles) need <u>not</u> go through the normal procedures required for experimental courses. However, school and board approval would normally be necessary. In addition, Program Consultants in the regional offices of the Ontario Department of Education would be available to help schools or school systems develop a course of this nature to suit local conditions.

*1 A half-course credit could be adopted to a school that is on the semester plan.

It should be noted that this proposed course is not establishment-oriented nor is it programmed to serve the manpower needs of business and industry*[2]. Its prime function, however, is to assist students to become more aware of themselves as contributing individuals and aware of the multitude of ways in which they can use their various talents productively. Simply, it is to help an individual become what he is capable of becoming.

Decision-making skills form an integral part of the course so that individuals can utilize the skills beyond the immediate task of career decision-making.

Not overlooked, is the whole complex question of work itself. The three and four-day week, high unemployment, the welfare question, and the hippie concept of work will be woven into the relevant course content.

*[2] This is not to say that national needs and trends in occupations would be ignored.

Purpose of the Course

With the implementation of Part A of H.S.I., including individual timetabling and continuous progress, the group guidance programs in many cases have been abbreviated or eliminated. Although group guidance classes have traditionally been regarded as a service to students and not a subject per se, their proven value has been challenged and their difficulty in timetabling demonstrated.

A number of additional problems are associated with group guidance:

1) No credit is given for the course, hence for some students motivation is minimal.
2) Students have not always been ready to discuss careers and educational alternatives due to varying degrees of maturity.
3) Performance objectives and evaluation procedures have often been lacking.
4) Until recently, excellent resources (simulation, career games etc.) have not been available to counsellors.
5) Many counsellors have been reluctant to devote sufficient time to traditional group guidance programs because of the problems encountered above.

Purpose (cont'd)

Recent accountability studies indicate the student's genuine need for help in the areas of career development and planning. The proposed course is designed to involve the individual in the process of influencing his own future. The majority of students don't think of themselves as actually creating their own future, but rather, they just let it happen. Frequently students ignore abilities, personality characteristics and other important factors in the planning of their future.

In the proposed course, the individual would be actively engaged in the process of self-identification and group interaction. He would be encouraged to reach the realization that he is the one responsible for his own life, and consequently, is capable of creating the future he wants for himself.

The course activities are designed to assist the student to assess himself now and then to project himself into the future. Once a person has established where he is and where he wants to go, he can begin working on short and long-term goals.

Hopefully, by the end of the course, the student will have increased self-awareness, decision-making skills and will realize the need for a specific, but flexible plan of action relating to reaching his future goals.

Since this course will not meet the needs of all students, it is recommended that on-going guidance services be maintained.

Methodology

Basic to the methodology of the course are techniques which promote learnings in the affective domain. This is not to say that cognitive input is to be neglected. The course employs recent developments in creative decision-making strategies and a systematic career planning program. The following techniques are recommended:

-student research
-case study approach
-seminar presentations
-simulation techniques
-exposition

Hence, the course focuses on creating in the individual the ability to profit and grow personally from career related developmental tasks that enable him to adapt to a changing society.

Content or Topics

Topic 1. Course Overview

-description of the course - length, content depth, involvement, assignments, evaluation
-course expectations
    -of the teacher
    -of students
-course flexibility

Topic 2. Career Development Theories

(a) presented by the teacher

eg. Super (as an overview)

Holland (the personality component in career planning)

Ann Roe (environmental factors)

Ginsberg (irreversibility in career choice)

Teacher References

1. Roth, R. M.; Hershenson, D. B.; Hilliard T. The Psychology of Vocational Development Allyn & Bacon, Inc., Boston

2. Isaacson, L. E.; Career Information in Counselling and Teaching, 2nd edition Allyn and Bacon, Inc., Boston

3. Holland, J. L.: The Psychology of Vocational Choice, Blaisdell Publishing Co. 1966

4. Zytowski, D. G.; Vocational Behavior, Holt, Rinehart & Winston, Inc. 1968

5. Borow, H.; Man in a World of Work Houghton Mifflin Co. 1964

(b) student activity

interview and report on an older person's (preferably a senior citizen, not related to the family) career development to demonstrate some relationship to the career development theories above.

(n.b. - the instructor should present some structure here - eg. a list of questions, a model etc.)

Topic 3. Personal Development Inventory

(a) Presented by the teacher

(1) evaluation techniques

-self
-peer
-school
-society
-standardized testing

(11) Understanding the Standardized Test

-types of tests defined, explained and illustrated
-learning capacity
-achievement
-aptitude
-interest inventories
-personality - optional

-test construction
-test norms
-test benefits and limitations
-the bell curve
-reporting test results--the percentile, stanine, standard scores

(b) Student Activity - Volitional Testing Program

Once the teacher has covered the above points, a volitional testing program is offered to students as an objective means of building a personal development inventory. The students are offered the opportunity to take a standardized test in each of four areas - learning capacity, antitude, interest and achievement.

Implicit in the program is the provision which is made for feed-back. Opportunities are provided for group and individual interpretation.

Student Reference: Meeting the Test
Anderson, Katz & Shimberg
Scholastic Book Services, New York (1963)

Teacher References:

1. Using Tests in Counselling
   L. Goldman
   Appleton, Century, Crofts Inc. (revised 1971)

2. Test Scores and What they Mean
   H. Lyman
   Prentice-Hall, (1971)

Topic 4. Educational Opportunities

The study and acquisition of educational information by students and counsellors have proven, over the years, to be an unrewarding, laborious process which yields questionable results. Rather than conduct a formal study of the mirads of literature available on this subject it is proposed that issues in education be researched and discussed as a means to the end of finding out just what further education if any a student should persue. In the end, the student will have acquired information which is relevant to him.

The following suggestions could be handled in seminar presentations by students, by discussion groups, guest speakers, films etc.:

1. What's the point of going to university?
2. How do you finance your education beyond grade 12 or 13? How much does it cost?
3. What are the alternatives to attending college or university if you want more education?
4. Should women be encouraged to seek a university degree?
5. What's the best college or university for me?
6. Are community college graduates employable?
7. Why do certain courses have prerequisites?
8. If I return to Canada after taking a medical, law, or dental degree can I practice in Ontario?
9. What is an athletic scholarship and where do you get them?

Topic #5. You and the World of Work

The volume of information available about vocational opportunities is overwhelming both to students and counsellors. The systematic study of the material requires a very high degree of motivation and a high level of prolonged persistence. Moreover, since each person brings his own set of needs and priorities to the material, what is valuable and meaningful to one person can be useless to another.

This unit poses problems and situations which serve to stimulate interest in issues of a vocational nature. Similar to the previous unit it is anticipated that the student, in search of answers, will by necessity seek out relevant vocational information.

In-Put Suggestions

1. Have each student list his hierarchy of values related to work and conduct small group discussions about the differences in each other's list (e.g. race, right to work, sex, money, creativity, responsibility etc.)

2. Role-play some conflict situations about work choices to demonstrate how conflicts can be worked out (e.g. his value system says that money is very important in deciding between jobs. His desire to live in a given area is also critical. Add other lesser variables and work out choices.)

3. Present case situations where the class can discuss personal compromises that could be made (e.g. student would like to become a doctor but doesn't want to wait that long to get married).

4. Bring in a speaker who would point out what compromises he had to make in attaining his vocational goal, OR interview a person now working in the same occupation the student has tentatively chosen and ask him what compromises he had to make. The student interviewer might ask the interviewee if he wishes he had made a different decision and why. Discuss findings with the class.

5. Have a panel of retired people talk to the class about changes that occurred in their occupational field over the years and how they went about meeting new requirements of the jobs they held.

6. Have each student write a paper describing his life style at present and what he would like it to be 10 years from now. Then have the students discover how they will use the information in developing a career goal.

Exercises in evaluating the accuracy of occupational information received by the student.

7. Review, discuss and compare occupational films which promote various occupations. Identify the emotional content. Identify the factual content. Is there a message in the film? If so, what is it?

8. Have student collect and assemble occupational information and consider the biases and special interests of the authors and publishers.

9. Read "Death of a Salesman", discuss the occupational image presented and compare it to reality.

10. Discuss how attitudes are affected by information which appeals primarily to the emotions and consider the implications.

11. Have students present an occupational recruitment talk (e.g. promote or sell) to the group using various promotional and advertising techniques. Have the group discuss the effectiveness of the presentation and sort out the facts from the promotional content.

12. Draw a chronological line which would indicate points at which students begin to make occupational decisions (e.g. registering in 9th grade for curriculum choices, entering college, choice between specific vocational training as opposed to further academic exploration, part-time work experiences etc.).

13. Debate the philosophic attitude - "You can do anything if you try hard enough".

Reference: "Suggested Teaching-Learning Approaches for Career Development in the Curriculum"

by Distributive Educators and Counsellors Enrolled in a Pilot Training Project Focusing on Occupational Experience and Career Development.

University of Minnesota, College of Education, 1968

Topic 6. Personal Involvement in Career Planning

Now that the students have had some background in occupational and educational information, they can utilize this information in an effective way by playing the Life Career Game. It is a decision-making game in which students experience vicariously principles of the job, education and marriage markets as they exist today. Students play in teams of two competing against other teams to plan the most satisfying life for a hypothetical student presented to them in a written profile or case study. All teams plan the same person's life. Therefore, students can learn to:

1) Compare decision-making with their peers;
2) Examine personal values and goals; and
3) Become aware of factors and outcomes that effect their decision-making.

The mechanics of the game are fairly complicated and it can be simplified by utilizing only the profiles (or new ones made up by students) in small group decision-making tasks. Adequate preparation time is required in any case.

An individualized approach to career exploration is found in the Job Experience Kits which are simulated work experiences in twenty different occupations. Each kit gives the student a chance to try out realistic work problems in a specific occupation and an opportunity to test the reality of different kinds of work by playing the roles of the workers. Students would work through individual careers in which they had some interest.

There is an obvious need for Canadian material of this nature to be produced.

Resources

1. Life Career Game . .

   Western Publishing Company

   Palo-Alto Guidance Department

2. Job Experience Kit

   Science Research Associates

3. Career Development Laboratory

   (By means of career surveys the student is guided to one or more taped interviews.)

4. The Career Game

   (Besides an extensive exploration of careers, the game incorporates ideas of involvement, decision-making and concept building.)

Both of these resources are available from Educational Progress Co., 50 Galaxy Blvd., Rexdale, Ontario.

Topic #7 CREATIVE PROBLEM-SOLVING

A creative problem-solving section exists for the major purpose of applying its content to the many facets of one's life. Its primary objectives are:

(1) To introduce a variety of techniques for attacking problems creatively.

(2) To demonstrate to the student that he has more creative ability than he ordinarily puts to use.

(Creativity must be stimulated, motivated, induced.)

Creative problem-solving deals with a methodology which offers organized creativity where a person can examine his own procedures and apply them any number of times. Each individual is encouraged to develop a methodology that best suits him.

Perhaps the major benefits a student can derive from this activity are to increase awareness of his own resourcefulness, to provide a strong motivation to utilize his creative potential, to provide a spirit of pursuit of inquiry, to generate a greater curiosity and awareness of the excitement and challenge in life, and to develop a consciousness of the vital importance of creative effort in all areas of living.

Some of the material for creative problem-solving activities are derived from Doris Shallcross's course used in the Cleveland schools; the work done by Dr. Sydney Parnes of the State University of New York at Buffalo, Creative Behaviour Guidebook and Workbook, and Alex Osborn's book, Applied Imagination.

Several "brain-teaser" puzzles each week are suggested which enable the students to get into the habit of reviewing things from a number of angles, e.g., what is the missing number.

5	6	7	8	9
52	63	94		18

(Answer - 46, - The bottom row of numbers are the squares, reversed, of the top row.)

Suggested Topics

(1) Barriers to Creative Thinking

(a) Lack of knowledge (ability to throw ideas into fresh combinations).

(b) Use of knowledge (importance of what you do with knowledge).

(c) Habit (We tend to think in terms of previous solutions rather than new ones.)

Student Activity

(1) Arithmetic Test: Forty simple problems with these directions: In the following arithmetic problems "+" means to multiply, "÷" means to add, "-" means to divide, and "x" means to subtract.

(a) Allow two minutes.

(b) Discuss results. Most will not finish and will have worked down each column. (The key is to work all addition problems first, all division problems next, etc.)

(2) Nine dots: Draw four straight lines without lifting your pencil, connecting all dots. (Demonstrates how we have a tendency to stay within prescribed boundaries.)

(3) Four nines: Make four nines equal 100. (99 9/9)

Attitudinal Barriers

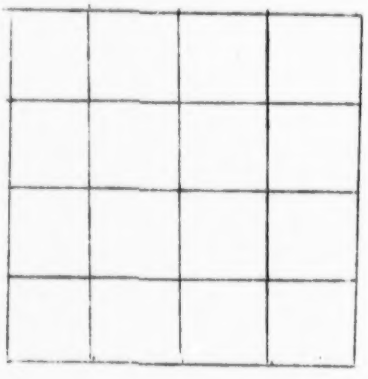
Lack of a positive outlook -- What is considered the impossible can become the actual -- other examples -- conformity, reliance on "authority" and lack of effort.

Overcoming Barriers to Creative Thinking

Without abundant imagination results may be negative because people are usually very self-critical of their ideas. The stress should be to throw out ideas without fear of being criticized. Divergent thinking is "zig-zag" rather than straight. It examines. It turns over. It questions. It prods. In convergent thinking, the solution is always what is expected. In divergent thinking, it never is. The divergent solution is a surprise, a genuine discovery.

Student Activity

Sixteen Squares Chart



1. Ask how many squares are in this chart.
2. Immediate reaction: sixteen.
3. Thirty squares can be pointed out.
4. Some may see seventeen or more but will say sixteen because they feel it is the expected answer. Another illustration of how fear of being wrong can block one's thinking.

Two Specific Techniques for Enhancing Creative Problem-Solving

1. Brainstorming

This name is given to a group session when it is adhering to the principle of deferred judgement. This device can be surprisingly effective in developing creative attitudes and abilities and for improved production of ideas.

Basic Rules

1. Criticism is ruled out. Judgement is suspended until subsequent evaluation.
2. Free-wheeling is welcomed. The wilder the ideas the better: it is easier to tame down than to think up.
3. Quantity is wanted. The greater the number of ideas, the more the likelihood of good ones.
4. Combination and improvement are sought. In addition to contributing ideas of their own, panel members should suggest how suggestions by others could be turned into better ideas, or how two or more ideas could be combined into a still better idea.

Student Activity

1. Practice session in group brainstorming.

   (1) Divide class into groups of six to eight.

   (2) Appoint a "livewire" leader to each group.

   (3) Appoint a secretary to tally the number of ideas.

   (4) Encourage a competitive spirit among the groups.

   Try one --

   The best way to find a part-time job.

   New products that should be invented.

   How radio programs could improve.

   How can young people help to improve the environment.

   The uses of _____(clothespin, cardboard box, discarded bottles, etc.)

2. The Use of Checklists

   (a) Checklists are used to stimulate thought when an individual or group feels ideas have "run dry". Because checklists suggest looking at a problem from many points of view, one can actually force additional ideas from his mind.

   (b) Osborn's checklist of Idea Spurring Questions

   1. Put to other uses? New ways to use as is? Other uses if modified?

   2. Adapt? What else is like this? What other ideas does this suggest?

3. Modify? Change meaning, color, motion, sound, odor, taste, form, shape? Other changes?

4. Magnify? What to add? Greater frequency? Stronger? Larger? Plus ingredient? Multiply?

5. Minify? What to subtract? Eliminate? Smaller? Lighter? Slower? Split up? Less frequent?

6. Substitute? Who else instead? What else instead? Other place? Other time?

7. Rearrange? Other layout? Other sequence? Change pace?

8. Reverse? Opposites? Turn it backward? Turn it upside down? Turn it inside out?

9. Combine? How about a blend, an assortment? Combine purposes? Combine ideas?

STUDENT ACTIVITY

1. Using Osborn's checklist as a stimulus outline what you would consider an improvement on the following: (done individually or in groups)

(a) a school;

(b) an automobile;

(c) a shopping centre; and

(d) a ballpoint pen

2. A hypothetical school named Superior Secondary School has a number of seemingly insoluble problems. In groups, using the checklist when needed, come up with some possible solutions to one of the following problems:

(a) Traffic congestion in front of the school;

(b) Students not turning out for sports (or dances);

(c) Garbage problem in the cafeteria;

(d) Student council needs money; and

(e) Poor school spirit.

EFFECTIVE PROBLEM-SOLVING (E.P.S.) MODEL

(Outlined in Behavioral Counselling -- Krumboltz & Thoresen)

Although the model presented in the book is designed for use with college-level clients, it has been used with pre-college students and can be adapted to meet the local needs of high school students.

Dr. Magoon has developed a very thorough and systematic process in solving educational and vocational problems. It teaches individuals the steps to be taken in effective problem solving. Although there is a heavy cognitive emphasis, opportunities are still provided for affective development. The 6 - 8 sessions needed to complete the program involve written work which helps to give coherence and sequence to the problem-solving process.

The model is individualized in the sense that the student can proceed at his own rate and the leader can raise questions on the basis of how the student has replied to the questions.

Student Activity

The student can work through most of the sections as indicated in the book with some minor revisions. (Essentially, this is a self-directed learning program.) Some adaptions can be made if time is a factor. It is suggested that the following pattern be followed:

(1) Model of the E.P.S. Process - Page 362

(2) Teacher can use Effective Problem Solving, P. 364 as an example for later problem-solving models.

(3) Occupations for investigation - Page 367

(4) Taking Stock of Your Study Time and Efficiency

(5) Taking Stock of Your Work Experience - Page 375

(6) Taking Stock of Your Leisure Experiences - Page 377
(An inventory of interests and aptitudes and achievements can generally be handled after the Personal Development Inventory section of the course.)

(7) Occupational Groups - Page 381

(8) Taking Stock of the Opinion of Others - Page 387

(9) Summary and Evaluation - Page 391, would be most appropriate at the end of the course.

It is further suggested that the students use and understand experience tables. This information can be found in Krumboltz's book starting on Page 333.

TOPIC #8 DECISION-MAKING STRATEGIES

Students should become proficient in developing a systematic approach to solving problems. After developing effective approaches to real life problems, the student then should be able to apply some of these strategies to career planning questions and problems.

Several models are presented to illustrate decision-making or inquiry approaches. Dr. Floyd Robinson of the Niagara Field Office of the Ontario Institute for Studies In Education has been helpful in adapting his logical inquiry approaches for this course on Career Development.

Applications of the "Real-Life Problem-Solving Model" To a High School Course on Career Development

1. Introducing the Real-Life Model

   (a) Teach the model using the Sawyer example, as outlined in the notes. (Real Life Model-Mr. Sawyer, page 33)

   (b) In reviewing what was done in this example, note that there are three critical "phases" in executing the model:

i) Limiting the alternatives - this requires that we rule out in advance alternatives which are not physically possible or for which we have low probability of succeeding; or which are incompatible with our values. This suggests the need for a preliminary study of one's abilities and values.

ii) Choosing the best alternative - on the basis of what things look like at the present time. (This involves our real-life problem-solving model.)

iii) Looking ahead - to see if what seems "best" in terms of present circumstances would remain best in light of possible future developments.

(c) This model deals with only one possible future development. Hence the need for going into all phases more thoroughly -- the purpose of the following series of classes.

(d) Set the Course problem: the rational choice of an occupational goal. The student is to work out and present the results of his deliberations. The adequacy of the effort that the student shows on this section is important for arriving at his final standing or credit.

II. Clarifying one's interests and values

As a preliminary step one might use such devices as an interest inventory to determine what occupational profile the students' interests seem most highly oriented toward. There is a need here, however, to invent some new strategies for having the student take a hard look at the things he really values. (Try some "utility" games -- would you prefer an additional $1000 in pay or an additional month of holidays?)

III. Exploring the parameters of occupations

The student will need a good deal of information on the job "feel", actual tasks, salary, working conditions, opportunities for advancement and so on in a variety of occupations. This will allow a preliminary screening out of occupations inconsistent with one's values and interests, (or the definition of a set or cluster of occupations consistent with one's interests and values).

IV. Investigating one's abilities

The student will have taken a fair range of standardized tests. From this the student should emerge with a rough profile of his abilities related to some general norm (e.g. his percentile rank in spatial ability in relation to professional architects).

V. Preferred grouping of occupational alternatives by clusters, according to their educational prerequisites.

Presumably the student will adopt a strategy of "keeping as many doors open as possible". This will require that he identify the educational prerequisites of groups of occupations (rather than single occupations) consistent with his interests and values (his preferred occupations).

VI. The Construction and Interpretation of Experience Tables

The students' preferred occupational clusters will require some sort of well defined training, so that the student should next estimate his chances of successfully completing this sort of training. For example, if a student has an IQ of 90, he should realize that only one person in five with this level of ability succeeds in the liberal arts program. Obtaining data to make such expectancy tables may prove to be quite a trick, but at least some of it is around at the present time.

VII. Eliminating implausible alternatives: (on the basis of high risk of failure).

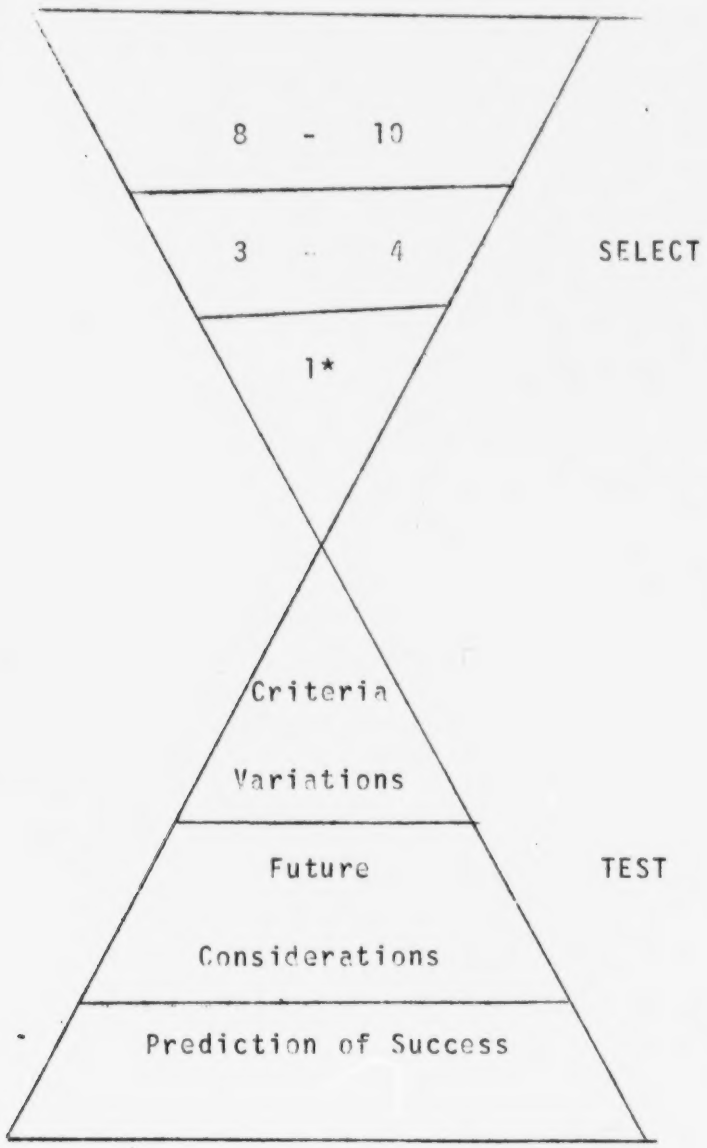
VIII. Applying the real-life problem-solving model to selecting "best" alternative.

In the inquiry model, the student has rated each alternative in terms of the way things are at present. However, if things were to change with the passage of time, it might turn out that he would rate a particular alternative more or less positively than he did. This suggests that he add a time dimension to his tabular analysis in which he tries to anticipate "significant personal events" and to envisage how this table of values would look at these points of time. In other words, the student would think of something which would make one of his alternatives more valuable (a shortage of the number of workers in that occupation in the future). The same should be done for each alternative, listing a development which would give the alternative both a lower and higher rating. It can be seen then that in making real-life decisions it is not only necessary to rate alternatives in terms of our present circumstances, but also to imagine what might happen in the future which would influence these ratings.

Finally, it can only be suggested that the human brain possesses a capacity to somehow "add up" these tabular values, and by so doing assess the overall desirability of each alternative and select the "best" one.

DIAGRAMATIC VERSION OF STEPS IN CAREER PLANNING

CAREERS



* or cluster

"REAL LIFE MODEL - MR. SAWYER"

Mr. Sawyer drives a 1966 Pontiac. Until a year ago he had no serious difficulty with the car, but repair bills have been occurring during the last twelve months with increasing frequency. He is wondering, therefore, whether he should buy a newer car.

As he thinks about his problem, Mr. Sawyer calls to mind certain things which he thinks are related to it. In the first place, his oldest son has just entered the last year of high school and would like to go on to university if his marks permit it; he could live at home but would need money for tuition fees. Another fact is that the Sawyers have for some time wished to build a recreation room in their basement and have only now accumulated enough savings (about $1,000.00) to do it. Mr. Sawyer also remembers that for some time now the family has wanted to buy a good quality hi-fi set, which would cost about $600. Moreover, although his wife has not said so, Mr. Sawyer realizes that she really would like an automatic dishwasher, which would probably cost about $200. Another relevant fact is that Mr. Sawyer works about a mile from his home and could walk to work in about fifteen minutes.

Mr. Sawyer's Problem

What is the best way for Mr. Sawyer to spend the $1,000.00 he has saved?

Alternatives: Some of the alternatives that Mr. Sawyer thought were reasonable are the following:

(1) Keep his money in the bank until his son is ready to use it to go to university.

(2) Build a recreation room.

(3) Buy the best car he could (with his $1000. plus what he would get by trading in his old car).

(4) Buy a dishwasher and a hi-fi set, and keep $200 in the bank.

In this case, as in many real life problems, we can see that there are an unlimited number of ways that Mr. Sawyer can spend his money. For example, consider the alternative "buy a car". Mr. Sawyer has $1000. plus what he gets for his old car (say $500.), and with this he can buy any number of cars costing $1,500. or less, or he can decide to go in debt and buy a car costing more than $1,500.

Thus, what even appeared to be a single alternative could actually give rise to an unlimited number of alternatives. The unlimited number of possible alternatives, plus the fact that a person has only a limited amount of time to make a decision, suggests that a very important step in a real life problem is to pick out several of the most attractive of these alternatives and to concentrate on getting information about them.

INFORMATION

In this problem, it is obvious that we will need a great deal of information about costs. In addition to this simple kind of information, we will need a lot of information, of a more difficult nature that has to do with a person's standards and values (next section).

(a) Criteria

The question asked is "What is the best way for Mr. Sawyer to spend his money?" In order to find out which alternative is best we must be able to judge one alternative as being better than another in some sense. To compare alternatives in this way we need standards on which to rate the alternatives. These standards on which we rate alternatives are called criteria.

Some possible criteria that occurred to Mr. Sawyer are the following:

(i) the opportunity to better oneself (as for example by going to university and improving one's knowledge)

(ii) the amount of effort saved (as for example, the effort saved in washing dishes if he buys an automatic dishwasher)

(iii) enjoyment (as for example, the enjoyment a person would get from listening to a hi-fi set)

As with alternatives, the list of criteria is not complete and a decision has to be made as to which criteria will be used to rate the alternatives. It is easy to see that for the same problem two people might not only select different alternatives but different criteria to rate them on as well.

(b) Rating the Alternatives

The next step in the information stage is to make a table in which we evaluate each alternative in terms of each of the criteria. When Mr. Sawyer filled in his table he used a rating scale that he had devised. The values on his scale were +++,++,+,0,-,--,---. The rating sign of +++ for an alternative on a given criteria meant that his alternative rated very high on that criterion. (e.g., University rated very high on "bettering oneself").

A rating of --- meant that the alternative rated very low on that criterion. A rating of 0 was considered neutral. In addition, since Mr. Sawyer was an unselfish man he decided that when he was rating each alternative he would consider the needs of the family as a whole and not just his own needs. In fact, he had each member of the family give each alternative a rating on each criterion, then he averaged the results and recorded them in the table.

It is apparent that how a person rates alternatives on a different criteria depends to a great extent on his personal values.

The following table shows Mr. Sawyer's family's ratings of the alternatives.

Table 1: What is the best way to spend the $1,000. in savings?

	1. Bank & University	2. Recreation Room	3. Car $1,500.	4. Dishwasher & Hi Fi & $200. in bank
better oneself	+++	+	0	0
effort saved	0	0	+	+++
enjoy-ment	0	+++	++	++
Total	+++	++++	+++	+++++

Adding up:

If Mr. Sawyer believes that all the criteria are of equal importance, then to decide which alternative is the best all he has to do is add up the different ratings for each alternative. In this case, the best alternative in our example would be number 4. In most real life problems, however, the criteria are not of equal importance and in these cases we have to give more emphasis to the criteria we consider to be more important. For example if we think that "bettering oneself" is more important than "effort saved", then we might have a scale that went from +++++ to ----- for "bettering oneself" and a scale from ++ to -- for "effort saved". The matter of determining how important the criteria are in comparison to each other depends again on what a person values and no two people would probably agree on the difference in importance on any two criteria.

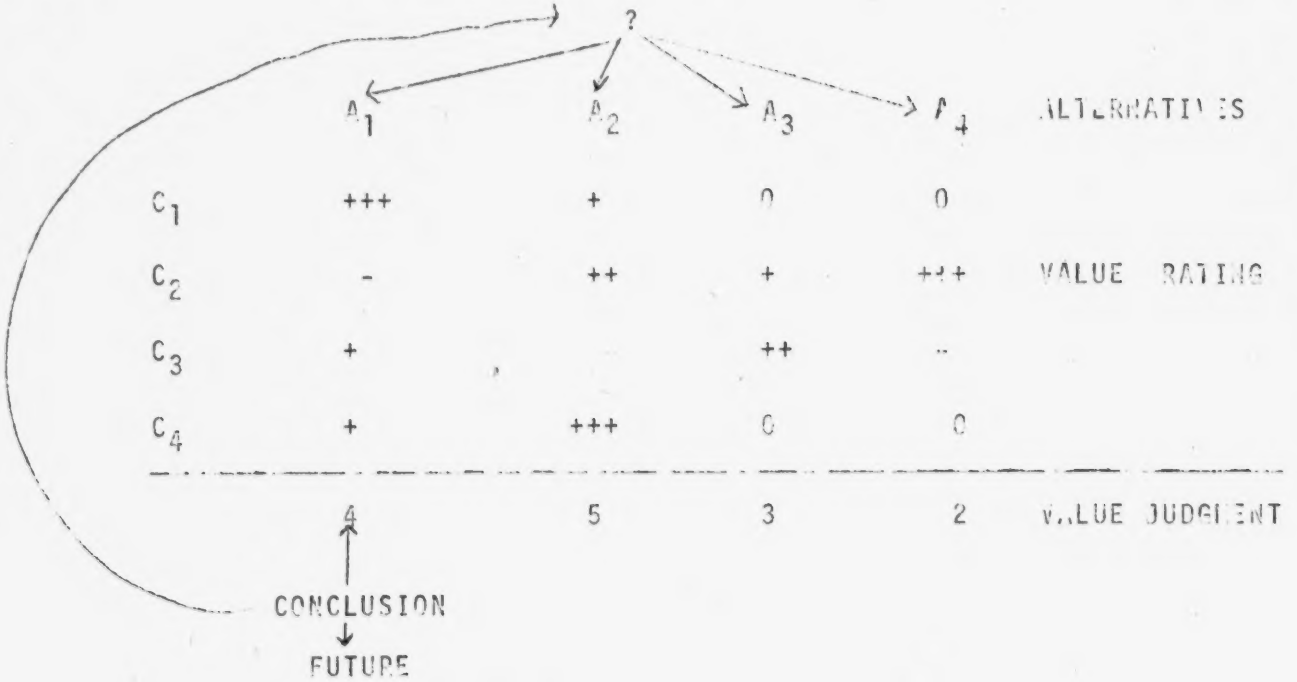
Another important factor that has to be considered in a real life problem is that events may take place in the future that could alter our table. For example, Mr. Sawyer might get a different job and have to use his car more often. In this case, he would probably have a new criterion for his table (i.e., necessary for livelihood) and the car alternative would rate very highly on this criterion.

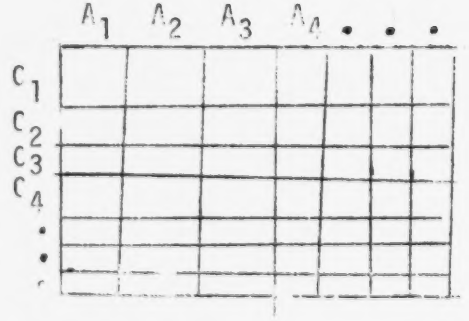
Choosing:

Once Mr. Sawyer has entered the values into his table, he would then probably scan each of the alternatives and experience a kind of "feel" -- based partly on the number of pluses or minuses he had given it -- for its overall worth. Then, Mr. Sawyer would choose the alternative which seemed to have the best overall "feel" for him.

INQUIRY MODEL

REAL LIFE PROBLEMS





Personal Problem-Solving Model for Educational and Vocational Guidance

Students should become proficient in the problem-solving skills which enable them to process information about themselves into short and long-term goals and into plans of action for achieving them. This model assumes that the student is able to engage in planning and decision-making activities wisely and independently with minimum support from others.

Skill Area #1: Understanding the Problem

Being willing to work toward setting and achieving educational and vocational goals.

Skill Area #2: Searching For and Using Information

(a) Personal information on abilities, interests, preferences, etc., and

(b) Information about related opportunities in the worlds of education and work.

Skill Area #3: Getting Alternatives

Thinking of several possible educational and vocational goals.

Skill Area #4: Selecting Goals and Making Plans

(a) Choosing the goals (first and second choice) that seem like the best bet for the individual, and

(b) Making plans for reaching them.

Skill Area #5: Carrying Out Plans

Carrying out the plans, switching to the second best goal if necessary.

Skill Area #6: Finding Out If It Works

(a) Judging whether the first (or the second best) goal has been achieved, and

(b) Describing what helped and what hindered the individual's efforts along the way.

This model will be more applicable if educational and occupational opportunities have been explored.

Student Activity:

Make up a case study of an individual who is trying to decide among four alternatives: going to university, to community college, to employment or to travel for a year. Use the model to work out criteria, value rating and a value judgment.

Topic #9. Synthesis - A Field Study

At this point in the course the student, over a period of 6 months has been a part of many experiences in terms of information gathering and self analysis. In a sense the student has been progressing to a tentative decision point in his life. If the student is prepared to commit himself to a tentative vocational choice, or two, it is appropriate that the student be released from school to conduct a field study in the areas of his choice. A 2 or 3 day release from school could be required.

In order to maximize the students time in the field it would be useful if the teacher and his students prepare beforehand some guidelines for the field study. Perhaps the format for reporting back to the class would help guide the inquiry of students (see "You and Your Career": 1967-72 Edition, M. D. Parmenter, P. 56-7, Check list for Investigating an Occupation).

For the student who has not reached this point in his thinking a field study of a more general nature should be planned. Such topics as "The Role of Women in the Work Force" or "Labour Unions" or other topics could be assigned.

After the field study has been completed each student reports back to the group, not only about information received but about attitudes perceived.

Additional Topics for Consideration

- Trends in Employment
- The Life Style of the Worker
- Vocations for Social Change
- The Impact of Automation
- Role of Women in the Work Force
- Unionism
- Corporate Organization
- Human Relations Training

PERFORMANCE OBJECTIVES

1. Given four theories of career development, the students will apply these theories by analyzing the career development of a senior citizen.

2. After receiving the results of self-chosen standardized tests, the students will construct a profile of their abilities related to some general norm.

3. The students will be able to locate current information about courses offered and entrance requirements of a given (specified) institution.

4. For a given occupation, the students will be able to locate current information which includes the nature of the work, working conditions, qualifications needed for entry and approximate remuneration.

5. As an exercise, the students will develop a written plan for the life of a hypothetical student for the next eight years.

6. After the students have learned a variety of techniques for attacking problems creatively, they will respond to a problem by utilizing one or more of the creative problem-solving techniques.

7. After learning the steps to be taken in effective problem-solving, the students will apply these steps to their own educational-vocational concerns by stating several possible plans of action using the E.P.S. Model.

8. Using the Real Life Problem-Solving Model, the student will utilize four criteria for each of three or four possible career choices and will place a value on each in order to make a tentative choice of a career or career cluster.

9. The students will test these tentative choices by varying the weight that they put on each of the criteria in accordance with their individual values.

10. The students will apply possible future events to the Real Life Problem-Solving Model, so that they adjust the weighting of given alternatives.

11. After the students have completed their first choice on-the-job placement, they will write a report integrating their previous information of the career with the actual on-the-job observation in order to assess whether or not they wish to proceed with this career choice.

12. By the end of the course, the students will be able to explain the connection and extent of the congruence between their philosophy of life and their career choice.

MEANS OF EVALUATION

Hopefully the course is self-rewarding and does not require a number of tests and exams in order to "motivate" students to learn. The evaluation of a student should be merely on a 'pass-fail' basis. The means of arriving at this point is primarily based on the completion of assigned or self-initiated tasks. To grade students on an A, B, C.....basis seems inconsistent in a course of this nature.

The basic obligations to be fulfilled by each and every student in a course like this are:

- to prepare for and conduct at least one seminar presentation
- to contribute at least one resource to the group such as a film, speaker etc.
- to take one or more standardized tests which are of interest to the student
- to try one or more strategy games to a point of completion
- to conduct an intensive field study and report back to the group

On the basis of the above the student receives a credit - a pass, or he fails to complete the course and receives no credit.

RESOURCES FOR CAREER DEVELOPMENT

VOCATIONAL DEVELOPMENT AND ADJUSTMENT

Psychology of Careers and Vocational Development

AUTHOR	TITLE	PUBLISHER
Borow, H. (ed.)	Man in the World at Work	Boston: Houghton-Mifflin, 1964
Crites, J. O.	Vocational Psychology	New York: McGraw-Hill, 1969
Isaacson, L. E.	Career Information in Counselling and Teaching	The Macmillan Co. of Canada Ltd.
Osipow, S. H.	Theories of Career Development	New York: Appleton-Century-Croft, 1968
Peters and Hansen (ed.)	Vocational Guidance and Career Development	Collier-Macmillan Canada Ltd., 1966
Roth, R. N. et al	The Psychology of Vocational Development	The Macmillan Co. of Canada Ltd.
Super, D. E. et al	Career Development: Self-Concept Theory	New York: College Entrance Examination Board, 1963
Super, D. E. and Bohn, M. J., Jr.	Occupational Psychology	Belmont, California, Wadsworth, 1970
Whiteley, J. M. (ed.)	Perspective on Vocational Development	Columbus, Ohio: Charles Merrill, Publishing Co., 1970
Zytowski, D. G. (ed.)	Vocational Behavior: Readings	New York: Holt, Rinehart & Winston, 1968

Special Studies

	AUTHOR	TITLE	PUBLISHER
PT	Flanagan, J. C. et al	The American High School Student	Pittsburgh, Univ. of Pittsburgh Press, 1966
PT	Flanagan, J. C., et al	Design for a Study of American Youth	Boston: Houghton-Mifflin, 1962
PT	Flanagan, J. C. and Tooley, W. W.	One Year Follow-Up Studies	Pittsburgh, Univ. of Pittsburgh Press, 1968
PT	Flanagan, J. C., et al	Project Talent: A Survey and Follow-Up Study	Pittsburgh, Univ. of Pittsburgh Press, 1962
CDS	Gribbons, W. D. and Lohnes, P. R.	Emerging Careers	New York: Teachers College Press 1968
CPS	Super, D. E., et al	Vocational Development: A Framework for Research	New York: Teachers College Press 1957
CPS	Super, D. E. and Overstreet, Phoebe	Vocational Maturity of Ninth Grade Boys	New York: Teachers College Press 1960

CPS = Career Pattern Study

CDS = Career Development Study

PT = Project Talent

Vocational Guidance

Hansen, Lorraine S.	Career Guidance Practices in School and Community	Washington: National Vocational Guidance Assoc., 1970
Ginzberg, Eli	Career Guidance: Who Needs It, Who Provides It, Who Can Improve It?	New York: McGraw-Hill, 1971
McGowan, J., and Schmidt, L.	Counselling: Readings in Theory and Practice	Toronto: Holt, Rinehart & Winston, 1962
Miller, C. H.	Foundations of Guidance	New York: Harper, 1961
Reuchlin, M.	Pupil Guidance: Facts and Problems	Strasbourg, Count. of Europe, 1964
Stewart, L. and Warnath, C. F.	The Counsellor in Society	Boston, Houghton-Mifflin, 1965
Super, D. E., and Crites, J. O.	Appraising Vocational Fitness	New York: Harper & Row, 1962
Tyler, Leona	The Work of the Counsellor	New York: Appleton-Century-Crofts

Computer-Assisted Vocational Guidance

Super, D. E. (ed.)	Computer-Assisted Counselling	New York: Teachers College Press, in press for Nov. 1970
U.S. Office of Education	Computer-Based Vocational Guidance Systems	Washington: U.S. Government Printing Office 1969
Ontario Dept. of Education	Student Guidance Information System	See local Program Consultant in Guidance

RESOURCES FOR CREDIT COURSE ON CAREER PLANNING

Creative Problem Solving

AUTHOR	TITLE	PUBLISHER	PRICE
Parnes, Sidney J.	Creative Behaviour Guidebook	(Scribners) John Wiley & Sons, 22 Worcester Rd., Rexdale, Ont.	$3.50
Parnes, Sidney J.	Creative Behaviour Workshop	(Scribners) John Wiley & Sons, 22 Worcester Rd., Rexdale, Ont.	$3.50
Osborn, Alex	Applied Imagination	(Scribners) John Wiley & Sons, 22 Worcester Rd., Rexdale, Ont.	$3.50 approx.
Parnes and Harding	A Source Book for Creative Thinking	(Scribners) John Wiley & Sons, 22 Worcester Rd., Rexdale, Ont.	$11.25
	Creative Thinking	Distribution Education Materials Laboratory, (U.S.) The Ohio State Univ. 1885 Neil Ave. (115 Townshend Hall), Columbus, Ohio, U. S. A. 73210 (Cheques should be made out to Ohio State University.)	$3.50

FILMS

Halewyn Films distributed by Thomas Nelson & Sons, 61 Curlew Drive, Don Mills, Ontario.

Architectural Careers
Cosmetic Industry Careers
General Insurance Careers
Marketing Careers
Modelling Careers
Newspaper Careers
Newspaper Marketing Careers
Ophthalmic Careers Part I and II
Textile Industry Careers

Films for rental or purchase (various prices)

Company-sponsored films through (free rental)
Modern Talking Pictures Service Inc.,
1875 Leslie Street,
Scarborough, Ontario.

Also many companies have their own film libraries for loan to schools such as Kodak, Imperial Oil, Shell, B.P., Ford, etc.

WERC Career Films available from:
A.P.G.A. Film Sales,
1607 New Hampshire Avenue N.W.,
Washington, D.C., 20009.

Work -- What's It All About?
Careers in Allied Health Services
Careers in the Building Trades
Careers in Business and Offices Occupations
Careers in Communication
Careers in Industry
Careers in Machine Trades
Careers in Personal Service
Careers in Sales -- The Joys of Selling
Careers in Skilled Services
Careers in Transportation
How Do You Get There?

Purchase price $225.00 -- Rental price $20.0[illegible]

JOB - film from the Human Journey Series (Mutual Life - Canada) (excellent overview)
Aaailable free from:
The Board of the Lake Erie Regional Library,
305 Queens Avenue,
London, Ontario.

BOOKS (MAINLY FOR STUDENT USE)

AUTHOR	TITLE	PUBLISHER	PRICE
Gaymer, Rosemary	Career Planning and Job Hunting/Occupational Options (listed in Circular 14)	McLean Hunter	$4.95
Wallace, Jack	Tomorrow? (listed in Circular 14)	J. M. Dent & Sons	$2.00
Morris, Joan	Careers Today (listed in Circular 14)	McClelland & Stewart	$1.25
	Canadian Classification and Dictionary of Occupations (C.C.D.O.)	Information Canada (or from local bookstores)	
Bryn, Delmont K	Career Decisions	National Vocational Guidance Assn., 1607 New Hampshire Ave. N.W., Washington, D. C. 20009	$ .50 (quantity discount)
Reichert, Richard	Self-Awareness Through Group Dynamics	George A. Pflaum Publishers	$1.95

Educational Guidance Information System (EGIS)
An experimental program sponsored by: (write for additional information)
College Entrance Examination Board,
Post Office Box 933,
Princeton, New Jersey,
U.S.A.
08540.

MISCELLANEOUS

A Guide for Developmental Vocational Guidance — (free)
Oklahoma State Department of Education, Oklahoma City

Adjustment to Work, A Psychological View at Man's Problems in a Work-Oriented Society (1969) — $3.50
from: Appleton-Century-Crofts

On the Job -- by J. L. Norton -- J. G. Ferguson Co., Chicago, Ill. — $7.95
(Excerpts from diaries of 65 workers reporting in some detail what each worker did in one week)

Occupational Information and Guidance -- by Daniel Sinick -- $1.60
Houghton-Mifflin Co. (Thomas Nelson)

Vocational Guidance Models, A Review, (1970) — $1.00 U. S. funds
Publications Distributions, State Dept. of Education, Albany, New York, U.S.A. 12224

Women in the World of Work -- by Helen B. Wolfe -- Division of Research, State Education Department, Albany, New York, U.S.A. 12224 — (free)

Excellent information on careers for women from:
Women's Bureau, Ontario Department of Labour
74 Victoria Street, Toronto, Ontario.

Using Tests in Counselling -- by L. Goldman -- from:
Appleton-Century-Croft (1971)

Test Scores and What They Mean -- By H. Lyman,
Prentice-Hall (1971)

Behavioural Counselling -- by Krumboltz & Thoresen — $7.95

Occupations and Careers -- Feingold & Swerdloff -- from:
McGraw-Hill (1969)

Your Future in a Changing World -- by Brunetti and Higgerson
from: Richards Rosen Press Inc., New York, 10010, U.S.A.

Counsellor's Information Service (Bibliography of Guidance Publications Available) from:
B'Nai B'rith Vocational Service,
1640 Rhode Island Avenue N.W.,
Washington, D.C.,
U.S.A.
20036

GAMES, LABS AND KITS

Life Career Game -- Western Publishing Co.	$40.00
Job Experience Kit -- (Krumboltz) -- from S.R.A.	$154.70
Career Games -- Educational Progress Co., 50 Galaxy Blvd., Rexdale, Ontario.	$85.00
Career Development -- Educational Progress Co. Laboratory	$205.00